

Gaston Kage, I V

addition of hydrogen to a stad double bond in the acti-
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KAZANSKIY, B.A.; GOSTUNSKAYA, I.V.

Addition of hydrogen to an isolated double bond effected by calcium hexammoniate. Zhur.ob.khim. 25 no.9:1704-1711 S '55. (MIRA 9:2)

1.Moskovskiy gosudarstvennyy universitet.
(Hydrocarbons) (Amines) (Hydrogenation)

GOSTUNSKAYA, I. V.

Isomerization of unsaturated hydrocarbons with calcium
amide. I. V. Gostunskaya and B. A. Kazanskii. *J. Gen.
Chem. U.S.S.R.* 25, 1943-7 (1955) (Engl. translation).—See
C. A. 50, 8437h.

2

GOSTUNSKAYA, I. V.

1996

Isomerization of unsaturated hydrocarbons with calcium amide. I. V. Gostunskaya and N. A. Kazanskiy (Sverdlovsk Univ., Moscow) Chem. Abstr. 75, 10, 5, 257 (1972), cf. C. 1, 33, 179. Calcium amide, formed by the exothermic decomposition of Ca hexammonate, has isomerizing power with respect to mono- and dienes at reflux temp. The double bond migrates to the center of the molecule and isomers are converted to conjugated 1-omers. Ca reacted with NH_3 at -5° gave the crude hexammonate which slowly decomp. at room temp. (90% in 18 days). This material refluxed 2 hrs with 3-methyl-1-butene gave nearly 100% 2-methyl-2-butene as did 2-methyl-1-butene; no change took place with 2-methyl-2-butene. 2-Methyl-2-hexene in 2 hrs gave the isomer, b. 91.5° , n_D^{20} 1.4185, d_4^{20}

0.7082. 1,5-Hexadiene gave mainly 2,4-hexadiene. 2-methyl-1,5-hexadiene gave almost 100% 2-methyl-2,4-hexadiene, and 2,5-dimethyl-1,5-hexadiene gave about 75% 2,5-dimethyl-2,4-hexadiene. The reaction is rapid and is substantially complete in 1-2 hrs. at reflux. The use of 0.33 mole amide per mole of hydrocarbon gives satisfactory results.

G. M. Kozlov

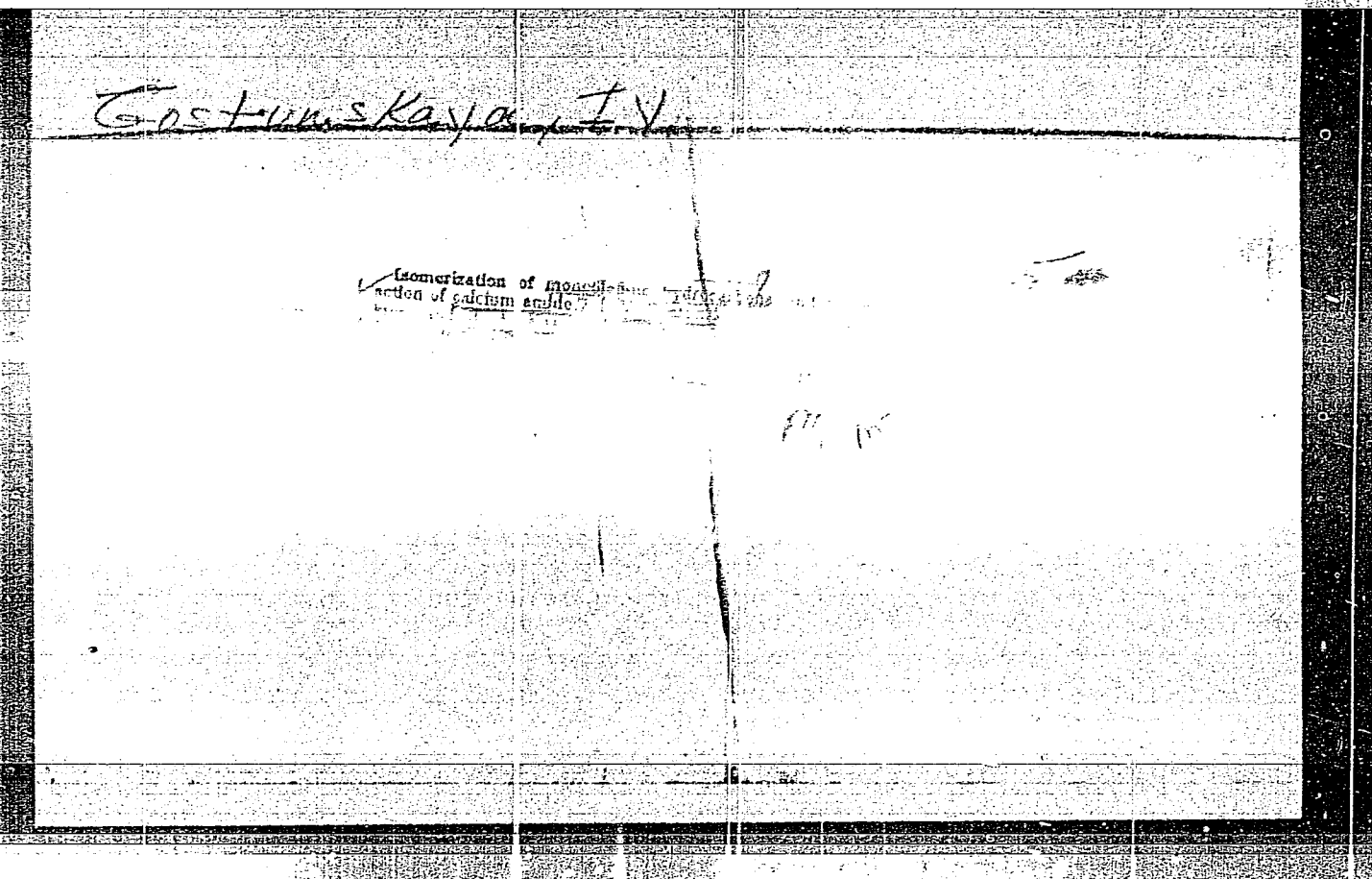
1996

Gostunskaya, I. V.

8

ch ✓ Reduction of unsymmetrical diene hydrocarbons with calcium hexammoniate. I. V. Gostunskaya, E. A. Davankova, and E. G. Trushchikova (Moscow, U.S.S.R. 1955-8; 1956); cf. L.A. 50, 1310b.—Dehydration of 3,4-dimethyl-3,4-hexanediol with $\text{H}_2\text{PO}_4\text{Ac}_2\text{O}$ gave 3-methyl-2-ethyl-1,3-pentadiene, b_p 131.3°, n_D^{20} 1.4760, d_4^{20} 0.7918. This (31.2 g.) was reduced with Ca hexammoniate (from 40 g. Ca) yielding 28.5 g. mixed products identified as 3-methyl-2-ethyl-1-pentene (13%), 3,4-dimethyl-2-hexene, and 3,4-dimethyl-3-hexene (13%, 32%, 35%, resp.). Reduction of 65.1 g. 2-methyl-2,4-hexadiene with Ca hexammoniate (from 62 g. Ca) gave 53.7 g. products composed of 31% *trans*-2-methyl-3-hexene, 20% *trans*-4-methyl-2-hexene and 49% 2-methyl-2-hexene, identified by Raman spectra. The Raman spectrum of 2-methyl-2-hexene is (cm.⁻¹) 276(10), 325(3.5), 345(3), 378(3.5), 421-34(4.5), 463(8.5), 512(6.3), 547(0), 557(0), 710(4.0), 763(6.5), 789(8), 832(6), 869(21), 897(2), 981(0), 1040(14), 1072(22), 1089(26), 1117(0), 1144(16.5), 1170(12), 1196(11), 1240(9), 1268(4), 1298(9), 1320(14), 1339(20.5), 1353(12), 1382(51), 1437(65), 1458(71), 1674(129). (G. M. Kosolapoff

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GOSTUNSKAYA, I. V.

USSR/ Organic Chemistry - Theoretical and general questions
on organic chemistry

E-1

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11593

Author : Gostunskaya I.V., Tyun'kina N.I., Kazanskiy B.A.

Inst : [Academy of Sciences USSR] *Moscow State Univ.*

Title : Isomerization of Mono-Olefinic Hydrocarbons by Action of Calcium Amide

Orig Pub : Dokl. AN SSSR, 1956, 108, No 3, 473-476

Abstract : Study of isomerization of 2- and 3-methylbutene-1 (I and II) hexene-1 (III), 2,3-dimethylbutene-1 (IV), 2,3-dimethylbutene-2, 2,5-dimethylhexene-2 at 70° and 2,5-dimethylhexene-3 at 120°, by action of $\text{Ca}(\text{NH}_2)_2$. Study of isomerization products has revealed that the double bond is shifted from the end of the chain to the middle, as well as from the middle to the end, and in the mixture of isomers predominates the isomer having the greatest degree of substitution at the double bond. III is isomerized more rapidly than IV. With decreasing degree of substitution at the allyl carbon rate of isomerization increases (I is isomerized to 2-methylbutene-2 more rapidly than II). The authors assume that the reaction takes place with intermediate

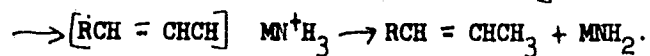
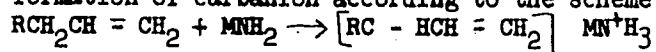
Card 1/2

USSR/ Organic Chemistry - Theoretical and general questions
on organic chemistry

E-1

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11593

formation of carbanion according to the scheme (wherein M is metal):



Card 2/2

SOV/81-59-9-32804

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 9, pp 478 - 479 (USSR)

AUTHORS: Entin, I.G., Silant'yeva, A.G., Gostunskaya, I.V., Khromov, S.I.

TITLE: An Investigation of the Group Chemical Composition of Light Oil of Kerosene Pyrolysis //

PERIODICAL: V sb.: Sostav i svoystva neftey i benzino-kerosinovykh fraktsiy. Moscow, AS USSR, 1957, pp 417 - 427

ABSTRACT: The group composition of 2 light oils of kerosene pyrolysis (I and II) has been studied. Diolefines (with conjugated double bonds) were separated by heating with maleic anhydride (4 hours, boiling in ampoules). For the determination of aromatic hydrocarbons (H) with unsaturated side chains and of the nature of unsaturated H after elimination of diolefines, hydrogenation of the oils I and II and the fractions of oil I of up to 95, 95 - 122, 122 - 150, 150 - 175; >175°C was carried out under soft conditions (skeleton Ni-catalyst, usual temperature), as well as sulfonation before and after hydrogenation. The content of paraffins and naphthenes was determined

Card 1/2

SOV/81-59-9-32804

An Investigation of the Group Chemical Composition of Light Oil of Kerosene
Pyrolysis

from the anilin points of the fractions. It has been established that the content of aromatic H of unsaturated nature is 12.5 and 10.5%, aromatic H of saturated nature 71.5 and 78.5, paraffin H 3.5 and 1.6, naphthene H 3.0 and 1.4, olefines 2.5 and 3.5, cycloolefines 3.0 and 3.0, diolefines with conjugated bonds 4.0 and 1.5.

Ye. Pokrovskaya

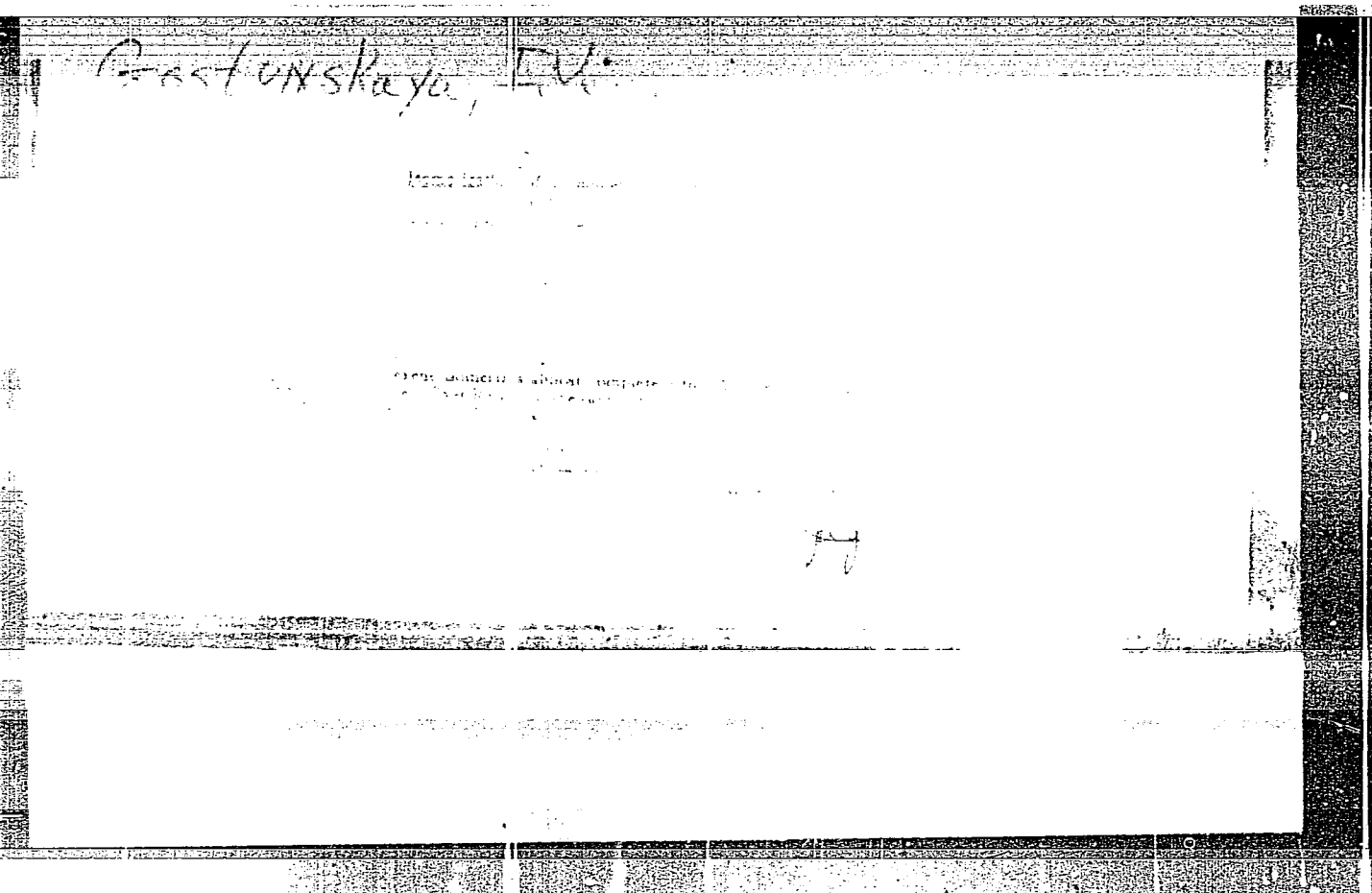
Card 2/2

GOSTUNSKAYA, I.V.

KAZANSKIY, B.A., akademik; LIBERMAN, A.L.; LUKINA, M.Yu.; GOSTUNSKAYA, I.V.

Catalytic conversion of hydrocarbons. Khim. nauka i prom. 2 no.2:
172-180 '57. (MIRA 10:6)

(Hydrocarbons)



20-114-3-26/60

AUTHORS: Gostunskaya, I. V., Rozhkova, M. I., Kazanskiy, B. A.,
Member of the AN USSR

TITLE: The Reduction of Monoolefines by Alkali Metals in Liquid Ammonia (Vosstanovleniye monoolefinovykh uglevodorodov shchelochnymi metallami v srede zhidkogo ammiaka)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 114, Nr 3, pp 545-548 (USSR)

ABSTRACT: Until recently hydrogen "in statu nascendi" was said to be able to reduce such double compounds, as $C=C$, which are conjugated either with other double compounds or with an aromatic nucleus. During recent years several examples of the reduction of olefine compounds by so-called hydrogen in statu nascendi were proved. Kraus and later Burton and Ingold as well as Birch suggested considering the incidental reaction of hydrogen with a double compound (on the occasion of the influence of sodium dissolved in liquid ammonia) as an ion-reaction. Together with the reduction also a side reaction of hydrogen precipitation may occur. In the present work the influence of the characteristic and the structure of the olefine, the metal- and alcohol characteristic on the velocity

Card 1/4

20-114 -3-26/60

The Reduction of Monoolefines by Alkali Metals in Liquid Ammonia

of the reduction-reaction of the aliphatic monoolefines in liquid ammonia were studied. Experimental material was normally built: pentene-1, hexene-1, octene-1, nonene-1, decene-1, octene-2 and heptene-3. Na, Li and K were used as reduction metals. Methanol and ethanol were added as proton suppliers. In the presence of methanol the reaction was relatively easy and showed 40 % production. Pentene-1, hexene-1 and heptene-1 were more quickly reduced. Octene-1 was reduced more slowly and produced 20 %. It was far more difficult with nonene-1 and decene-1 where 3 - 6 % were produced. Olefines with a double compound distant from the end of the chain (heptene-3 and octene-2) can not be reduced at all. An increase of the concentration of methanol leads to an increased precipitation of free hydrogen and to a decrease of the production of saturated olefine. If methanol is replaced by the less acidous ethanol the reduction occurs more quickly. Nonene-1 and decene-1 are reduced to 20 and 8 % respectively under these conditions. If K or Li with methanol are used as reductors the olefines mentioned can be reduced more slowly than with the use of Na. Their relative activity in the reduction-reaction does, however, not correspond with their position in the series in liquid ammonia. This series would be Na, K, Li.

Card 2/4

20-114 -3-26/60

The Reduction of Monolefines by Alkali Metals in Liquid Ammonia

The greater hydrogen precipitation by K and Li should reduce the velocity of reduction of the olefines investigated, as this velocity is lower than the velocity of the competing precipitation reaction of free hydrogen. The experimental part with the constants, production and production methods of the substances investigated follows.

Final conclusions: 1) In the case of a reduction of olefines by alkaline metals in liquid ammonia with the addition of alcohol the production of saturated olefines decreases with increasing molecular weight of the olefine. 2) Olefines with a β - and γ -position of the double compound can not be reduced under given experimental conditions. 3) Sodium is the most active of all alkaline metals used for reduction (Li, Na and K). 4) The replacement of methanol by the less acidous ethanol increases the production of saturated olefines in the reduction of olefines of a composition C_5-C_{10} . There are 4 tables and 16 references, 5 of which are⁵Slavic.

ASSOCIATION:
Card 3/4

Moscow State University imeni M. V. Lomonosov
(Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova)

20-114 - 3-26/60

The Reduction of Monolefines by Alkali Metals in Liquid Ammonia

SUBMITTED: January 24, 1957

Card 4/4

GOSTUNSKAYA, I. V.

AUTHORS: Shatenshteyn, A. I., Dubinskiy, Yu. G., 62-1-20/29
Yakovleva, E. A., Gostunskaya, I. V., Kazanskiy, B. A.

TITLE: Catalytic Reactions on the Surface of Solid Amides of Calcium and Potassium (O katalicheskikh reaktsiyakh na poverkhnosti tverdykh amidov kal'tsiya i kaliya)

PERIODICAL: Izvestiya AN SSSR Otdeleniye Khimicheskikh Nauk, 1958, Nr 1, pp. 104-106 (USSR);

ABSTRACT: In the investigation of the deuterioexchange in alkenes, catalyzable by means of the solution of potassium amide their isomerization (in the dislocation of the double compound) was found. The isomerization also catalyzes the solid amide of calcium in case that the solvent is not present. The isomerization of the alkenes belongs to the few examples of reactions which occur in alkaline catalysis. It is assumed that the isomerization leads through the stage of carbonion formation. There is no doubt a common characteristic of the reasons for isomerization reactions in the deuterioexchange and their belonging to the class of basic acid reactions. They are catalyzed by the ions of the amide in ammonia solutions and the solid amides under heterogeneous conditions.

Card 1/2

There are 1 figure, and 11 references, 8 of which are Slavic.

Catalytic Reactions on the Surface of Solid Amides of Calcium 62-1-20/29
and Potassium

ASSOCIATION: Physicochemical Institute imeni L. Ya. Karpov, and State University imeni M. V. Lomonosov (Fiziko-khimicheskiy institut imeni L. Ya. Karpova i Moskovskiy gosudarstvennyy universitet imeni M. V. Lomonosova)

SUBMITTED: July 12, 1957

AVAILABLE: Library of Congress

1. Amides-Catalytic properties

Card 2/2

5(3)

AUTHORS:

Kazanskiy, B.A., Costunskaya, I.V.,
Popova, N.I. and Dobroserdova, N.B.

SOV/55-58-3-25/30

TITLE:

Catalytic Hydrogenation of Diene Hydrocarbons With Conjugate
System of Double Bonds (Kataliticheskoye gidrirovaniye
diyenovykh uglevodorodov s sopryazhennoy sistemoy dvoynykh
svyazey)

PERIODICAL:

Vestnik Moskovskogo universiteta, Seriya matematiki, mekhaniki,
astronomii, fiziki, khimii, 1958, Nr 3, pp 207-216 (USSR)
V.1.13

ABSTRACT:

The present paper contains no new results but gives a survey
of the western and eastern investigations during the last
40-50 years concerning the catalytic hydrogenation of diene
with conjugate system of double bonds. Among the eastern
publications there are mentioned the papers of S.V. Lebedev,
and then numerous present investigations of the authors, further-
more papers of R.Ya. Levina, V.R. Skvarchenko, N.I. Tyun'kina,
N.D. Zelinskiy, M.Yu. Lukina, and A.I. Malyshev. There are 3
tables, and 36 references, 22 of which are Soviet, 6 American,
5 German, 2 English, and 1 French.

ASSOCIATION:

Kafedra khimii nefti (Chair of Petroleum Chemistry)

SUBMITTED:

July 1, 1957

Card 1/1

Gostunskaya, I. V.

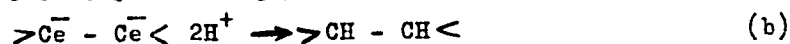
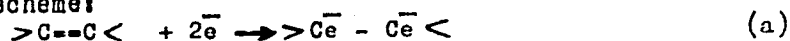
20-2-26/60

AUTHORS: Rozhkova, M. I. , Gostunskaya, I. V. , Kazanskiy, B. A. , Academician

TITLE: Reduction of Mono-Olefins by Sodium in Liquid Ammonia in the Presence of Tertiary Butyl Alcohol (Vosstanovleniye monoolefinovykh uglevodorodov natriyem v zhidkom ammiake v prisutstvii tretichno-butilovogo spirta)

PERIODICAL: Doklady AN SSSR, 1958, Vol. 118, Nr 2, pp. 299 - 301 (USSR)

ABSTRACT: The reduction of the isolated carbon-carbon double bonds by alkaline metals in liquid ammonia apparently takes place according to an ionic scheme:



The total speed of the reduction reaction is determined by the relation of the speeds of two concurrent reactions: the addition reaction of hydrogen to the double bond of the olefin (a) and (b) and the separation reaction of the free hydrogen (v). These speeds are on their part dependent on the structure of the olefin, the nature of the metal and on the acidity of the protolytic agent. In

Card 1/3

20-2-26/60

Reduction of Mono-Olefins by Sodium in Liquid Ammonia in the Presence of Tertiary Butyl Alcohol

an earlier paper by the authors (reference 1) it was stated that α -monoolefins with a double bond more distant from the chain-end cannot be reduced by Na, K and Li in liquid ammonia in the presence of methyl- and ethyl-alcohol. The action of the two electron-giving alkyl groups at the double bond apparently renders the formation of the carbanion difficult. In other words the speed of reaction (a) is thereby reduced. Consequently the relative speed of the side-reaction (v) increases. It was therefore interesting to reduce monoolefins with different positions of the double bond in the presence of a weaker proton-source than methyl- and ethyl-alcohols. Thereby the speed of the side-reaction was to be reduced. As such a weak protolyte they selected tertiary butyl alcohol whose acidity (according to reference 2) amounts to 1/10 of that of ethyl alcohol. Sodium served as reducing metal. The following normally constructed monoolefins were subjected to the reduction: pentene-1, hexene-1, heptene-1, octene-1, nonene-1, decene-1, pentene-2, a mixture of hexene-2 and hexene-3, heptene-3 and finally octene-2. Most of these α -monoolefins may be more rapidly reduced in liquid ammonia in the presence of tertiary butyl alcohol than with the use of methyl- or ethyl-alcohol (table 1). β - and γ -monoolefins may under the same conditions only be reduced to a very limited extent, but the reaction is accelerated by certain modifications

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Reduction of Mono-Olefins by Sodium in Liquid Ammonia in the Presence of Tertiary Butyl Alcohol

20-2-26/60

of the method. Thus even the reduction of so reduction-inert hydrocarbons as the last-mentioned ones can be obtained by slowing down the formation of free hydrogen due to the use of a weaker protolytic agent. The position of the double bond in the chain of β - and γ -olefins as well as the differences of their molecular weight hardly exert any influence upon the speed of the reduction. Thus this position exerts little influence upon the results of the reduction. An experimental part with the usual data is given. There are 3 tables, and 3 references, 1 of which is Slavic.

ASSOCIATION: State University imeni M. V. Lomonosov, Moscow
(Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova)

SUBMITTED: July 17, 1957

AVAILABLE: Library of Congress

Card 3/3

5(3)

AUTHORS:

Gostunskaya, I. V., Gusar', N. I., SOV/20-123-5-23/50
Leonova, A. I., Kazanskiy, B. A., Academician

TITLE:

The Reduction of Diene Hydrocarbons With a Conjugate System
of Double Bonds by Hydrogen at the "Instant of Its Liberation"
(Vosstanovleniye diyenovykh uglevodorodov s sopryazhennoy
sistemoy dvoynykh svyazey vodorodom "v moment vydeleniya")

PERIODICAL:

Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 5,
pp 853-856 (USSR)

ABSTRACT:

Hydrogen at the instant of its liberation is capable of
attaching itself to the diene hydrocarbons, not only in the
1.4-position, but also in the 1.2-and 3.4-positions (Refs
1-6). The sequence of the attachment depends on the structure
of the diene. The attachment in the 1.2-and 3.4-positions is
favored by the larger number of alkyl groups in the 1st and
4th terminal carbon atoms (di-isocrotyl and 2-methyl-hexadiene-
2.4): the alkyl groups at the 2nd and 3rd atoms of the
conjugate system have the same effect with regard to the
1.4-position (isoprene and di-isopropenyl). By the reduction
with sodium solution in liquid ammonia (Refs 1-4) or with
calcium-hexa-ammoniate (Refs 5-6), metal amides are formed

Card 1/3

The Reduction of Diene Hydrocarbons With a Conjugate SOV/20-123-5-23/ 50
System of Double Bonds by Hydrogen at the "Instant of Its Liberation"

simultaneously with the hydrogen attachment to the double bond. It has recently become clear that the amides are capable of catalysing the displacement of the double bonds in mono- and diolefin hydrocarbons (Refs 7-10). Consequently, it could be expected that under certain conditions the structure of mono-olefins resulting from the attachment of a hydrogen molecule to the dienes should depend, not only on the structure of the initial diene, but also on the secondary reaction of the isomerization under the influence of the resulting metal amide. In order to eliminate the isomerizing effect of the metal amide, ethyl alcohol was added to the sodium solution in liquid ammonia (Ref 11). Besides, di-isopropenyl was reduced by calcium-hexa-ammoniate, and di-isocrotyl was reduced by sodium in liquid ammonia (Ref 2). The results are shown in table 1. From this it can be seen that on the reduction from all its sources at the moment of its liberation, hydrogen is attached almost exclusively in the 1.4-position of di-isopropenyl. The reduction of di-isocrotyl is less selective, although hydrogen is attached here in the 1.2-positions. From a comparison of the data for calcium-hexa-

Card 2/3

The Reduction of Diene Hydrocarbons With a Conjugate SOV/20-123-5-23/50
System of Double Bonds by Hydrogen at the "Instant of Its Liberation"

ammoniate as well as for sodium solution in liquid ammonia with those for the latter solution to which, however, ethanol has been added, it can be seen that although the secondary isomerization reaction somewhat modifies the results of the primary reaction, it does not distort them. Thus the rules governing the effect of the structure of dienes on the direction of their reduction, as specified in the papers by Levina, Kazanskiy, and collaborators, remain valid. There are 2 figures, 7 tables, and 16 references, 15 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: August 5, 1958

Card 3/3

PLATE, A.F., prof., otv.red.; GOSTUNSKAYA, I.V., red.; TITS-SKVOETSOVA,
I.N., red.; ERIVANSKAYA, L.A., red.; KONDRASHKOVA, S.F., red.;
YERMAKOV, M.S., tekhn.red.

[Collected studies of the interuniversity conference on chemistry
of petroleum] Sbornik trudov meshvuzovskogo soveshchaniya po
khimii nefti. Moskva, Izd-vo Mosk.univ., 1960. 313 p.

(MIRA 13:11)

1. Meshvuzovskoye soveshchaniye po khimii nefti. 1956.
(Petroleum)

5.3300

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SOV/62-60-1-26/37

AUTHORS: Gostunskaya, I. V., Tyun'kina, N. I., Kazanskiy, B. A.

TITLE: Brief Communications. Isomerization of Some Dienes in the Presence of Calcium Amide

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1960, No 1, pp 132-133 (USSR)

ABSTRACT: Isomerization of 1,5-hexadiene, 2-methyl-1,5-hexadiene, and 2,5-dimethyl-1,5-hexadiene in the presence of calcium amide at 70° in a flow system with a space velocity 0.2, was studied in order to find correlations between the structure of the investigated dienes and the rate of their isomerization. The data obtained were compared with those obtained by A. Henne and A. Turk (J. Am. Chem. Soc., 64, 826, 1942) using Al_2O_3 as a catalyst, under identical conditions, at 365° . The data obtained show that there is not much difference in the rate of isomerization of different dienes with calcium amide, but there is a big difference in the

Card 1/4

Brief Communications. Isomerization of Some
Dienes in the Presence of Calcium Amide

78030

SOV/62-60-1-26/37

Key: (a) Starting diene; (b) properties of diene; (c)
bp in °C; (d) properties of products of catalysis; (e)
degree of isomerization.

a	b		d_1^{20}	d		e	
	c	n_D^{20}		n_D^{20}	d_1^{20}	Ca(NH ₂) ₂	AlEt ₃
CH ₂ =CH-CH ₂ -CH ₂ -CH=CH ₂	59,7	1,4038	0,6935	1,4388	0,7164	72	30
CH ₂ =C-CH ₂ -CH ₂ -CH=CH ₂	88,1	1,4102	0,7190	1,4570	0,7314	77	38
CH ₂ =C(CH ₃)-CH ₂ -CH ₂ -C=CH ₂ CH ₃ CH ₃	113,9	1,4299	0,7419	1,4714	0,7593	81	81

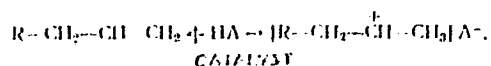
Card 2/4

Brief Communications. Isomerization of Some
Dienes in the Presence of Calcium Amide

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SOV/62-60-1-26/37

rate of isomerization of dienes with Al_2O_3 . The above data confirm the generally accepted view that acid and basic catalysts have different mechanisms. Isomerization of olefins in the presence of an acid catalyst (Al_2O_3) proceeds through the formation of intermediate carbonium ions:



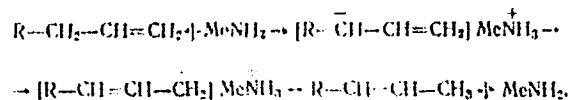
Isomerization of olefins in the presence of a basic catalyst ($Ca(NH_2)_2$) proceeds, apparently, through the formation of carbanions by elimination of protons.

Card 3/4

Brief Communications. Isomerization of Some
Dienes in the Presence of Calcium Amide

78080

SOV/62-60-1-26/37



There are 1 table; and 4 references, 1 U.S., 3 Soviet.
The U.S. reference is: A. Henne, A. Turk, J. Am. Chem.
Soc., 64, 826 (1942).

ASSOCIATION: M. V. Lomonosov Moscow State University (Moskovskiy
gosudarstvennyy universitet imeni M. V. Lomonosova)

SUBMITTED: June 9, 1959

Card 4/4

S/195/60/001/004/013/015
B017/B055

AUTHORS: Gostunskaya, I. V., Dobroserdova, N. P., Berdnikova, M. P.,
Kazanskiy, B. A.

TITLE: Isomerization of Several Hexenes Over Calcium Amide

PERIODICAL: Kinetika i kataliz, 1960, Vol. 1, No. 4, pp. 612-616

TEXT: The authors investigated the isomerization of 1-hexene, 2-methyl 1-pentene, 3-methyl 1-pentene, 4-methyl 1-pentene, and 2,3-dimethyl 1-butene on calcium amide as catalyst. The data obtained are listed in Table 1. This table also gives a comparison with aluminum oxide as catalyst. The composition of the fractions obtained is shown in Tables 3-7. The boiling-point curves of the isomerizates of the hexenes are graphically represented in Figs. 1 and 2. A comparison of the relative isomerization rates of hexenes on Al_2O_3 and calcium amide as catalysts shows that the structure of the olefin has less influence on the rate of isomerization in the case of calcium amide. There are 2 figures, 7 tables, and 10 references: 6 Soviet and 4 US.

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Card 1/2

Isomerization of Several Hexenes Over
Calcium Amide

S/195/60/001/004/013/015
B017/B055

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State
University)

SUBMITTED: July 23, 1960

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5(3)

07/85

305/80-130-1-22/69

AUTHORS: Kazanskiy, B. A., Academician, Goshunskaya, I. V., Dobroshezdova, N. B.

TITLE: Isomerization of Some Hexenes in the Presence of Aluminum Oxide

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 130, Nr 1, pp 82-85 (USSR)

ABSTRACT: The authors investigated the influence of the structure of mono-olefins on the relative displacement velocity of the double bond in the presence of an acid catalyst (aluminum oxide). As is known, the same olefins may behave differently in the presence of catalysts of different kinds (acid or alkaline). Also the structure of the monoolefin may affect the readiness of isomerization. The authors carried out the isomerization at 80° and a volume velocity of 2.64 h⁻¹ and 0.23 h⁻¹ (for difficultly isomerizable hexenes), respectively. The relative isomerization rates were characterized by the amount of olefin transformed under equal conditions. Table 1 shows the results. The different behavior of the individual hexenes is clearly to be seen: 2-methyl-pentene-1 and 2,3-dimethyl-butene-1 isomerize quickly, whereas hexene-1, 3-methyl-pentene-1 and 4-methyl-pentene-1 and 4-methyl-pentene-1 isomerize very slowly. The readiness of isomerization of the two former substances is explained by the

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Isomerization of Some Hexenes in the Presence of
Aluminum Oxide

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presence of methyl groups on the double bond. They have an electron-donor character, and facilitate the addition of the proton to the olefin while a carbonium ion is formed. The other 3 hexenes have no alkyl substituents on the double bond. They form the carbonium ion with greater difficulty, and therefore isomerize more slowly. The authors' results permit a correct choice of catalysts for the isomerization and of the conditions for experiments with an olefin of a given structure. On the other hand, an undesirable isomerizing effect of substances with acid properties during other reactions (hydrogenation, alkylation, etc) can be avoided on the basis of these data. Table 2 presents the constants of hexenes with a double bond within the chain, which may have developed by a shift of the double bond of the initial olefins. Figure 1 shows the fractionation curve of the

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Aluminum Oxide

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2-methyl-pentene-1 and of the 2,3-dimethyl-butene-1, and table 3 shows the characteristics of the fractions obtained. Figures 2 and 3 present the said curves for the other substances investigated. There are 3 figures, 3 tables, and 6 references, 4 of which are Soviet. ✓

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University, named M. V. Lomonosov)

SUBMITTED: September 28, 1959

Card 3/3

GOSTUNSKAYA, I.V.; PLATE, A.F.; KIRONOV, S.I.

Reactions of hydrogenation and dehydrogenation of
hydrocarbons in works of the Academician B.A. Kazanskii.
Vest.Mosk.un.Ser.2:khim. 16 no.3:63-68 My-Je '61.

(MIRA 14:10)

1. Kafedra Khimii nefti Moskovskogo gosudarstvennogo
universiteta.

(Kazanskii, Boris Aleksandrovich, 1891-)
(Hydrogenation)

GOSTUNSKAYA, I.V.; LEONOVA, A.I.; DOBROSERDOVA, N.B.; KAZANSKIY, B.A.

Isomerization of hexenes under conditions of liquid-phase hydrogenation in the presence of palladium black. Nefte-khimiia 3 no.4:498-502 JI-Ag '63. (MIRA 16:11)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.

KAZANSKIY, B.A.; DOBROSERDOVA, N.B.; BAKHMET'YEVA, G.S.;
GOSTUNSKAYA, I.V.

Isomerization of hexenes in the presence of palladized
coal. Neftekhimiia 3 no.4:503-506 J1-Ag '63.

(MIRA 16:11)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova,
khimicheskii fakul'tet.

KAZANSKIY, B.A.; GOSTUNSKAYA, I.V.; CHESNOKOVA, S.Ye.; DOBROSERDOVA, N.B.;
LEONOVA, A.I.

Stereoisomeric conversions of individual cis- and trans-3-methyl-
2-pentenes in the presence of aluminum oxide calcium amide. Nef-
tekhimiia 3 no.6:871-875 N-D '63. (MIRA 17:3)

1. Moskovskiy gosudarstvennyy universitet im. Lomonosova, kafedra
khimii nefi.

GOSTUNSKAYA, I.V.; MIRONOVA, V.A.; DOBROSERDOVA, N.B.; KAZANSKIY,
B.A., akademik

Chemical nonequivalence of active forms of hydrogen sorbed
by a skeleton nickel catalyst. Dokl. AN SSSR 153 no.5:1071-
1072 D '63. (MIRA 17:1)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.

GOSTUNSKAYA, I.V.; GO CHIN-FYN [Kuo Ch'in-feng]; KAZANSKIY, B.A.

Hydrogenolysis of cyclopentane hydrocarbons in the presence
of platinum deposited on aluminum oxide. Izv.AN.SSSR.Ser.
khim. no. 5:832-836 My '64. (MIRA 17:6)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.

DOBROSERDOVA, N.B.; BAKHMET'YEVA, G.S.; LECNOVA, A.I.; GOSTUNSKAYA, I.V.;
KAZANSKIY, B.A.

Displacement of double bonds in hexenes in the presence of
platinum catalysts. Neftekhimiya 4 no.2:215-218 Nov-ap'64
(M RA 17:8)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova,
khimicheskii fakul'tet.

GOSTUNSKAYA, I.V.; LEONOVA, A.I.; KAZANSKIY, B.A.

Stereoisomeric conversions of individual cis- and trans-3-methylpentenes-2 under conditions of catalytic hydrogenation in the liquid phase. Neftekhimia 4 no.3:379-381 My-Je '64.
(MIRA 18:2)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova, Khimicheskii fakul'tet.

GOSTUNSKAYA, I.V.; GO CHIN-FYN [Kuo Ch'in-feng]; KAZANSKIY, B.A.

Hydrogenolysis of cyclopentane hydrocarbons in the presence of platinum deposited on silica gel. Izv. AN SSSR. Ser. khim. no.6: 1073-1077 Je '64.

Catalytic transformations of cyclopentane and its homologs in the presence of platinum deposited on aluminosilicate. Ibid.: 1078-1082 (MIRA 17:11)

1. Moskovskiy gosudarstvennyy universitet.

GOSTUNSKIY, A.N., doktor tekhnicheskikh nauk.

Stable river bed. Vop.gidr. no.1:25-32 '55.
(Hydraulics)

(MLRA 9:12)

GOSTUNSKIY, A.M., doktor tekhnicheskikh nauk.

Channel bottom sedimentation. Vop.gidr.no.1:87-92 '55. (MLBA 9:12)
(Sedimentation and deposition)

SOV/98-59-8-10/33

30(1)

AUTHOR: Gostunskiy, A.N., Doctor of Technical Sciences

TITLE: Natural Parabolic River-Beds

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1959, Nr 8, pp 41-44 (USSR)

ABSTRACT: The article consists of a series of formulae used to determine the erosive effect of the current on the river-bed, but the author makes the reservation that such calculations are bound to be treated with a certain amount of latitude. The factors to be considered in such calculations are the dimensions and shape of cross-sections of those parts of the river-bed affected by erosion or the accumulation of silt. The formative current Q_e is taken to be a fairly frequent, heavy current, based on observations of the yearly average, currents in excess of it flooding the river-valley, and those below average only partially filling the normal cross-section of the river-bed (Fig.1). Another element involved is the angle of the river bank, including the angle of meanderings, expressed as i . The author criticizes the formulas of Professor S.T. Altunin for the width of rivers at times of normal current Q_s ,

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Natural Parabolic River-Beds

namely, $B = A Q^{\frac{0.5-0.2}{1}}$ (where $A = 0.75 \div 1.70$) and $B^m = kh$ (where $k = 8 \div 20$ and $m = 0.5 \div 1.0$). In order to solve the question of whether Altunin's equations can be given with instant coefficients, they are replaced by the equation $L = AM^m N^p$ connecting the variable values L , M and N . By taking logarithms, the equation is reduced to $\frac{L}{L_0} = \left(\frac{M}{M_0}\right)^{a_2} + \left(\frac{N}{N_0}\right)^{a_2}$. T. Christen's work "Nachweis der

Gleichgewichtsformel für natürliche Flussläufe" is recommended as containing data on the rules of the theory of correlation, based on research on 36 rivers, including the Aar, Elbe, Rhine, Eger, Tiber, Seine, Rhone, Danube, Nile, Volga and Mississippi. The results of calculations carried out by the author are given in tables 1 and 2, from which the equations $B = 1.50 Q_e^{.56 i - 0.16}$, $h =$

$0.11 Q_e^{0.31 i - 0.13}$, and $v = 6.1 Q_e^{0.13 i - 0.29}$ are obtained; by multi-

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plication, $Bhv = Q = 1.003 Q_e$. Hence, Altunin's two formulas are re-

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Natural Parabolic River-Beds

placed by $B = 1.50Q_e^{.56}i^{-0.16}$ and $B = B^h = 13.6Q_e^{.25}i^{-.03}$ respectively. For the cross-section of the river it is convenient to take the equation for a profile parabola $\eta = \zeta^2$, covering all the possibilities shown in fig.2, where $\eta = \frac{y}{h_0}$ and $\zeta = \frac{x}{0.5B} = \frac{2x}{B}$; the equation can therefore be expressed thus: $y = h_0 \left(\frac{2x}{B} \right)^2$. For the angle of inclination, where $x = 0.5B$ and $\text{tg } \varphi = \mu$, we have: $\mu = \varepsilon h_0 \left(\frac{2}{B} \right)^\varepsilon \left(\frac{B}{2} \right)^{\varepsilon-1} = \frac{2\varepsilon h_0}{B}$, hence $\varepsilon = \frac{\mu B}{2h_0}$. To find the area of the normal cross-section Ω we have $\Omega = \frac{\varepsilon}{\varepsilon+1} Bh_0$. To determine the height h , we have $\Omega = Bh$, hence $h_0 = \frac{\varepsilon+1}{\varepsilon} h$; can thus be reduced to $6.8 Q_e^{0.25}i^{-0.03}$. Additional data is provided concerning the raising of the level of the river due to flooding, and the average flood currents of various Central Asian rivers and their coefficients of variation are given in table 3. There are 3 diagrams and 3 tables.

Card 3/3

BODROV, Ivan Yakovlevich; GOSTUNSKIY, Nikolay Nikolayevich; YERSHOVA, I.,
red.; IVANOV, N., tekhn.red.

Tarusa. Kaluga. Kaluzhskoe knizhnoe izd-vo, 1960. 93 p.
(Tarusa) (MIRA 14:1)

GOSTUŠKI, Rista.

Therapeutic use of medicinal plants 3., ispr. i dop. izd. Beograd, Rad, 1954. 623 p.

GOSTYEV, M. I.

"Investigation of the Problem of the Mechanism of Reactions of the Formation of Quinoid Systems in the Halogenation of Phenols." Sub 14
Nov 51, Moscow Order of Lenin Chemicotechnological Inst imeni D. I. Mendeleyev.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

GOSTYNSKA, M.

The planned steppe reservation in Kulin on the Vistula River near Wloclawek. p. 14

CHRONMY PRZYRODE OJCZYSTA. (panstwowa Rada Ochrony Przyrody)
Krakow. Vol. 15, no. 1, Jan./Feb. 1959
Poland/

Monthly List of East European Accessions Index (EEAI), LC, Vol. 8, no. 6, June 1959
Uncl.

GOSTYNSKI K.

GOSTYNSKI, K.

Three days on the Ruppın Canal.

p. 6 (Zolnierz Polski) No. 22, Oct. 1957, Warszawa, Poland

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

GOSTYNSKI, S.

GOSTYNSKI, S.

For better documentation in laboratories, p. 11. (GOSPODARKA ZBOZOWA, Warszawa, Vol. 6, no. 2, Feb. 1955.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, Jan. 1955, Uncl.

GOSTYNSKI, S.

Powerful elevators in newly acquired lands, p. 14. Tr. from the Russian, (GOSPODARKA ZBOZOWA, Warszawa, Vol. 6, no. 2, Feb. 1955.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, Jan. 1955, Uncl.

GOSTYNSKI, S.

What has been written in the German Democratic Republic on grain from combines, p. 15.
(GOSPODARKA ZBOZOWA, Warszawa, Vol. 6, no. 2, Feb. 1955.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 4, Jan. 1955,
Uncl.

L 12896-65 EMT(1)/EED-2/MA(h) Feb ASD(a)-5/ASD(d)/ESD/AFTC(b)/AFETR/RAEM(a)/
ESD(c)/ESD(gs)/ESD(t)
ACCESSION NR: AT4046239 S/2535/64/000/159/0257/0272

B

AUTHOR: Gostyukhin, V. L., (Engineer)

TITLE: Operating accuracy of a continuous-action UHF mechanical phase shifter

SOURCE: Moscow. Aviatsionnyy institut. Trudy*, no. 159, 1964. Skaniruyushchiye
antenny* sverkhvyy* sokikh chastot (Super-high frequency scanning antennas),
257-272

TOPIC TAGS: antenna theory, frequency scanning, superhigh frequency, phase
shifter, waveguide

TRANSLATION: The author makes the point that the accuracy requirements of UHF
phase shifters, which continuously change the phase of a transient wave and are
used in antenna systems, vary in each concrete case, depending on the arrangement
used in the connection of the phase shifter. A schematic diagram of a continuous-
action mechanical phase shifter (see Fig. 1 of the Enclosure) is analyzed. It is
pointed out that the device consists of three separate sections, designed of
circular waveguide segments. The first and third sections are quarter-wave, the
second - half-wave. All three sections may be designed to use either length-wise
metallic (dielectric) insert pieces ("knives") or they may be built with inductance

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rods. The metallic insert variety is discussed in this paper. Because of technological inaccuracies in the manufacture of the waveguide phase shifter or in its adjustment, at the output of any of the three sections the amplitudes of mutually perpendicular components are not equal, but their phases are shifted at angles differing from the design angles of 90 and 180°. This results in an ellipticity of the field in the phase shifter and, consequently, in phase and amplitude errors at its output. The author studies the effect of separately sectioned amplitude and phase errors at the output of each section on the operational precision of the phase shifter. An analysis is made of the influence of sectional phase errors on the polarization characteristics of the phase-shifting mechanism. The same method of calculation is later applied to an investigation of sectional amplitude errors. There is a discussion of the effect of phase errors in the sections on the resultant phase shift achieved by the phase shifter. It is shown that, when sectional phase errors are present, the major axis of the polarization ellipse at the phase shifter output is inclined at an angle of 45° to the plane of the plates of the preceding section. When operating the shifter in UHF equipment, there is normally a transition from a circular waveguide to a rectangular waveguide, the broad wall of which is set at an angle of 45° to the plane of the plates of the last section of the phase shifter (that is, the

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direction of the major axis of the polarization ellipse constitutes a 90° -angle with the broad wall of the rectangular waveguide). It is also demonstrated that when there are phase errors in the sections, the amplitude and the phase error of the wave leaving the phase shifter change as the central section of the device is rotated. The phase error of the shifter will be maximum when θ (the angle between the immovable axis x_1 and the rotating axis x_2) is about 150° if the sectional phase errors are positive, and when θ is approximately 30° , if these errors are negative. When the second section is rotated, the phase error changes with doubled frequency. A formula is given for computation of the phase error in the event the sectional errors are of identical sign and magnitude. In the special case in which the phase errors of all three sections are equal in magnitude, but with opposite signs for the errors in the first and third sections, the phase error of the phase shifter changes with quadrupled frequency as the second section is rotated. Orig. art. has: 7 figures and 26 formulas.

ASSOCIATION: Moskovskiy aviatsionnyy institut (Moscow Aviation Institute)

SUBMITTED: 00

ENCL: 01

SUB CODE: EC

NO REF SOV: 001

OTHER: 001

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L 12896-65

ACCESSION NR: AT4046239

ENCL: 01 • 0

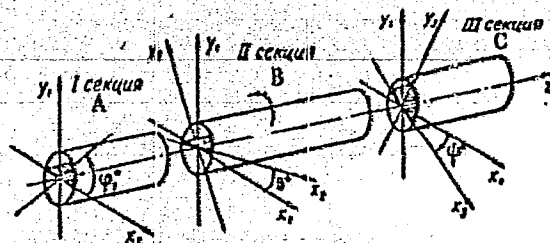


Fig. 1. Diagram of a continuous-action UHF phase shifter:

- a - I section;
- b - II section;
- c - III section

Card 4/4

GOSTYUNINA, P. P.

"The Anatomy of the Bile Duct in the Human Liver." Cand Biol
Sci, Stalingrad State Medical Inst, Stalingrad, 1953. (RZhBiol,
No 1, Sep 54)

SO: Sum 432, 29 Mar 55

ADAMYAN, V.Ye.; GOSUBKOV, A.V.; LOGINOV, G.M.

Magnetic susceptibility of samarium monosulfide. Fiz. tver. tela
7 no.1:301-304 Ja '65. (MIRA 18:3)

1. Institut poluprovodnikov AN SSSR, Leningrad.

GOSUDAREV, D.A.; RYKUNOV, A.V.

Centralized truck transportation of sand. Gor.khoz.Mosk. 28
no.6:30-31 Je '54. (MLRA 7:7)
(Sand--Transportation)

^{A.}
GOSUDAREV, D.; ANTIPOV, N.

Our experience in centralized delivery of goods. Sov. torg. 33
no.12:20-24 D. '59. (MIRA 13:2)
(Shipment of goods)

^{A.}
GOSUDAREV, D.; ANTIPOV, N.

Operating trucks with small load capacity. Avt. transp. 37 no.8:12-15
Ag '59. (MIRA 12:12)

1. Upravleniye torgovogo transporta Glavmosavtotransa.
(Motortrucks)

ANTIPOV, Nikolay Ivanovich [deceased]; GOSUDAREV, Dmitriy Alekseyevich;
BRONSHTEYN, L.A., red.; DONSKAYA, G.D., tekhn. red.

[Operation of motortrucks with low load capacity] Ekspluatatsiia
avtomobilei maloi gruzopod'emnosti. Moskva, nauchno-tekhn. izd-vo
M-va avtomobil'nogo transp. i shosseinykh dorog RSFSR, 1961. 42 p.
(MIRA 14:7)

(Motortrucks)

MAGNITSKIY, Konstantin Pavlovich, doktor sel'skokhozyaystvennykh nauk;
SHUGAROV, Yu.A., starshiy nauchnyy sotrud.; MALKOV, V.K., nauchnyy
sotrud.; prinimali uchastiye: ZUYEVA, N.P., nauchnyy sotrud.;
~~GOSUDAREVA~~, A.G., laborant; FEDORENKO, M.G., laborant; KAVUN, P.K.,
red.; BACHURINA, A.M., tekhn.red.; PROKOF'YEVA, L.N., tekhn.red.

[New methods of plant and soil analysis] Novye metody analiza
rastenii i pochv. Moskva, Gos. izd-vo sel'khoz.lit-ry, 1959.
239 p. (MIRA 14:5)

(Soils--Analysis) (Botanical research)

MAGNITSKIY, K.P., doktor sel'skokhoz. nauk; DOSPEKHOV, B.A., kand.
sel'skokhoz. nauk, dotsent; VASIL'YEVA, D.V., kand. sel'skokhoz.
nauk; GOSUDAREVA, A.G., nauchnyy sotrudnik; BELYAKOVA, N.G.,
nauchnyy sotrudnik

Diagnosis of the conditions of plant nutrition in a continuous
field experiment. Izv. TSKHA no.6:151-161 '63. (MIRA 17:8)

MAGNITSKIY, Konstantin Pavlovich. Prinimali uchastiye: GOSUDAREVA, A.G.; PANITKIN V.A.; BELYAKOVA, N.G.; KAPUSTYANSKIY, A.N.; ZHUKOV, S.N.; NIKULINA, F.F.; BALABANOV, B.G.; VISHNYAKOVA, Ye., red.; KUZNETSOVA, A., tekhn. red.

[Control of the nutrition of field and vegetable crops] Kontrol' pitaniya polevykh i ovoshchnykh kul'tur. Moskva, Mosk. rabochii, 1964. 302 p. (MIRA 17:2)

1. Nauchnyye sotrudniki laboratorii kaliya Nauchnogo instituta po udobreniyam i insektofungitsidam (for Gosudareva, Panitkin, Belyakova, Kapustyanskiy, Zhukov, Nikulina, Balabanov).

GOSUDAREVA, Z.; LESHCHINSKIY, A.

Experimental design of a store. Sov. torg. 35 no.12:46-48
D '61. (MIRA 14:11)

(Department stores)

GOSUDARSKAYA-KUZNETSOVA, B.V., fel'dsher

Poisoning from granosan. Fel'd. 1 akush. 25 no.3:43-44 Nr '60.
(MIRA 13:6)

1. TSelinyy Sel'sovet Yushno-Kazakhstanskoy oblasti.
(MERCURY ORGANIC COMPOUNDS--TOXICOLOGY)

GOSUDARSKIY, Lev Mikhaylovich; KALISHEVSKAYA, Valentina Antonovna;
ZILBERMAN, Yevgeniy Vladimirovich; BYDEL'S, Leonid Markovich;
GUS'KOV, G., redaktor; GARNIK, V.P., tekhnicheskiiy redaktor;
SOKOLOVA, R.Ya., tekhnicheskiiy redaktor

[Assignments in drawing] Pourochnye razrabotki po chercheniu.
Pod red. L.M.Gosudarskogo. Moskva, Izd-vo Akademii pedagogicheskikh nauk, 1956. 348 p. (MIRA 10:3)
(Mechanical drawing).

POLAND

GOSZCZ, Wladyslaw and MARC, Stanislaw, Internal Division
(Oddzial Wewnetrzny), Municipal Hospital (Szpital Miejski)
im. S. Zeromskiego in Krakow-Nowa Huta (Director: Docent,
Dr. J. MIKLASZEWSKA)

"Evaluation of Usefulness of Mathematical Formulas for Com-
puting Minute Heart Volume as Measured by Acetylene
Method."

Warsaw-Krakow, Przegląd Lekarski, Vol 19, Ser II, No 7, 31
Jul 63, pp 303-307

Abstract: The authors determined the minute heart volume of
healthy persons at rest by the acetylene method, and com-
puted it by means of the Starr and Liljenstrand-Zander for-
mulas. The Starr formula gave closer results and, with the
introduction of a calibration coefficient came to 93 per cent
of the measured value, and the authors consider it preferable
to the Liljenstrand-Zander, which came to only 91 percent of
the measured, after correction. They deem the Starr formula
satisfactory, but consider that similar determinations for
studies following exertion and in illness would be of more
practical value. 12 refs: 1 Soviet, 5 Polish, 2 German.
1/1

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GOSZCZ, Wladyslaw; MARC, Stanislaw

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000516420006-

Evaluation of usefulness of mathematical formulas in calculating
the minute volume of the heart measured by the acetylene method.
Przegl lek 19 no.7:303-307 '63.

1. Internal Department, S. Zeromski City Hospital, Krakow-Nowa
Huta. Head: Doc. dr J. Miklaszewska.

GAERTNER, Henryk; GAERTNER, Ludwika; GOSZCZ, Wladyslaw; PASEK, Tadeusz

Effect of body position on blood composition and circulation.
Acta physiol. Pol. 16 no.1:55-64. Ja-P'65.

J. III Klinika Chorob Wewnętrznych Akademii Medycznej w
Krakowie (Kierownik: prof. dr. J. Aleksandrowicz. Oddział
Chorob Wewnętrznych Szpitala Miejskiego w Krakowie- Nowej
Hucie (Ordynator: doc. dr. J. Miklaszewska).

GOSZCZYŃSKA, K.

Advances in analytical chemistry. K. Goszczyńska and
M. Rzywiska (Zakład Chem. Inst. Leków, Warsaw).
Farm. Polska 10, No. 8, 149-53 (1964).—Discussion.
L. J. Plotrowski

A 244

GOSZCZYNSKA, K.

GOSZCZYNSKA, K.; mgr.; ROZANSKA, M., mgr

Determination of pharmaceutical preparation with perchloric acid in anhydrous medium. Farm. polska 10 no.6:153-156 June 54.

1. Z Zakładu Chemii Instytutu Leków w Warszawie.

(DRUGS, determination

with perchloric acid, in anhydrous medium)

(ACIDS,

perchloric, determ. of drugs in anhydrous medium)

(CHLORINE,

perchloric acid, determ. of drugs in anhydrous medium)

GOSZCZYNSKA, KRYSZYNA

BOJANOWSKA, Anna; GOSZCZYNSKA, Krystyna

New form of disinfectants. Przegl. epidem., Warsz. 10 no.2:
161-168 1956.

1. Z Zakładu Epidemiologii Państwowego Zakładu Higieny.
(PEDICULI, effect of drugs on,
insecticides (Pol))
(INSECTICIDES, effects,
on pediculi (Pol))

GOSZCZYŃSKA, Krystyna; RADWAŃSKA, Helena

Tincture from root of Derris as remedy against head lice. Przegl. epidem., Warsz. 11 no.2:179-182 1957.

1. Z Zakładu Epidemiologii Państwowego Zakładu Higieny.
(PEDICULOSIS, prev. & control
tincture of Derris elliptica root in control of head
lice (Pol))
(INSECTICIDES, eff.
same)

The tincture from the root of Derris elliptica was effective against head lice, and was non-toxic for man. A 2-hour exposure is sufficient to kill both the lice and the nits.

EXCERPTA MEDICA Sec 17 Vol 6/5 Pub. Health. May 60

2303. A COMPARISON OF THE INSECTICIDAL EFFECT OF POWDER PREPARATIONS OF DDT AND HCH ON THE BODY LOUSE - Porównanie działania owadobójczego pylistych preparatów DDT i HCH na wszach odzieżowych - Gonczyńska K. - PRZEGL. EPIDEM. 1959, 13/2 (159-163)

Tables 4

investigations were made on the efficiency of 9 insecticidal preparations, 4 Polish and 5 others, containing DDT and gamma HCH. It was found that the Polish preparations were not inferior to the other preparations in efficiency as regards the body louse, *Pediculus humanus vestimentis*, and that preparations containing a mixture of DDT and gamma HCH are more effective than those containing only DDT.

GOSZCZYNSKA, Krystyna; STYCZYNSKA, Bogumila

Egg-destroying activity of organic phosphate insecticides.
Przegl. epidem. 17 no.4:321-325 '63

1. Z Zakladu Dezynfekcji, Dezynsekcji i Deratyzacji PZH;
kierownik: doc.dr. A.Bojanowska.

*

GOSZCZYNSKI, Jerzy

Behavior of vaginal smears in women under the influence of
stilbestrol in early pregnancy and following abortion.
Ginek. pol. 34 no.6:699-705 '63.

1. Z Kliniki Położnictwa i Chorob Kobietych AM w Białym-
stoku. Kierownik: prof.dr.med. S.Soszka.

*

GOSZCZYNSKI, M.

On the trail of aeronautic books. p. 6.
SKRZYDLATA POLSKA, Warszawa, Vol. 11, no. 24, June 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955,
Uncl.

GOSZCZYNSKI, SEWERYN

GEOGRAPHY & GEOLOGY

GOSZCZYNSKI, SEWERYN. Dziennik podróży do Tatrow. Opracował Stanisław Sierotwinski. Wrocław, Zakład Narodowy im. Ossolińskich (1958)
337 p. (Biblioteka narodowa. Seria 1, nr. 170) CU MIDW
Not in DLC

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 5,
May 1959, Unclass.

KUCZYNSKI, Wladyslaw; GOSZCZYNSKI, Stefan (Lodz)

Limit state of a reinforced concrete beam as final stage
of a continuous process of yielding and fissuration; case
of a fixed end beam. Archiw inz lad 10 no.3:249-265 '64.

Goszezyński, Stefan

Stearic acid-sulfur derivatives, Tadeusz Maciejowski and
Stefan Goszezyński, Polym. Sci.

rus. m. 100.

J. Stecki

POLAND / Analytical Chemistry. Analysis of Organic Substances. E

Abs Jour: Ref Zhur-Khim, No 12, 1959, 42165.

Author : Goszczynski, S.

Inst : Not given.

Title : Determination of Cyclohexanone Oxime by Means of p-Nitrophenylhydrazine and 2,4-Dinitrophenylhydrazine.

Orig Pub: Chem. analit., 1958, 3, No 2, 107-115.

Abstract: The method of quantitative determination of cyclohexanone oxime (I) in the form of p-nitrophenylhydrazone (II) and 2,4-dinitrophenylhydrazone (III) is described. A 5% solution of p-nitrophenylhydrazine hydrochloride (IV) with a 50% excess is added to the aqueous solution, containing > 0.005 g./ml.

Card 1/3

E-25

POLAND / Analytical Chemistry. Analysis of Organic Substances. E

"APPROVED FOR RELEASE: 03/13/2001" CIA-RDP86-00513R000516420006-

Abs Jour: Ref Zhur-Khim, No 12, 1959, 42165.

Abstract: of I, whereupon a yellow, colloidal, slowly coagulating precipitate is obtained; after 5-10 hours, the precipitate of II is filtered out, washed with water, dried at 105° and weighed. The error of this method is $< 1\%$. Lesser results are obtained in the presence of HCl. When I is determined in the form of III, a saturated solution of 2,4-dinitrophenylhydrazine (V) in 2 n. HCl in the amount of 75-100 ml. for each 0.1 g. of I is added to the aqueous or alcoholic solution of the sample (> 0.05 mg. of I in 1 ml.). After 6-12 hours, the precipitate of III is filtered out, washed with water, dried at 110° and weighed. The margin of error of this method is $\sim 1.2\%$. During a qualitative analysis, the minimum detected concentration of I with

Card 2/3

POLAND / Analytical Chemistry. Analysis of Organic Substances.

E

Abs Jour: Ref Zhur-Khim, No 12, 1959, 42164.

Author : Goszczynski, S.

Inst : Not given.

Title : Quantitative Determination of Cyclohexanone Oxime by Determination of the Products Obtained from Its Hydrolysis.

Orig Pub: Chem. analit., 1958, 3, No 2, 117-121.

Abstract: To determine cyclohexanone oxime (I) quantitatively, it is proposed to hydrolyze the sample with HCl and to determine NH_2OH according to Raschig or by using cyclohexanone (II) in the form of 2,4-dinitrophenylhydrazine. About 2 g. of the sample are mixed with 10 ml. of 10% HCl and II is distilled off with water vapor. About 350 ml. of distillate are col-

Card 1/3

APPROVED FOR RELEASE: 03/13/2001

POLAND / Analytical Chemistry. Analysis of Organic Substances.

F

Abs Jour: Ref Zhur-Khim, No 12, 1959, 42164.

Abstract: lected. The residue is diluted with water up to an amount of 50 ml., and 5 ml. of solution obtained in this manner are mixed with 10 ml. of water, 20 ml. of saturated solution of $\text{NH}_2\text{Fe}(\text{SO}_4)_2$ and 10 ml. of 50% H_2SO_4 . The mixture is boiled for 5 minutes, diluted in 300 ml. of freshly boiled cold water and titrated with a 0.1 n. solution of KMnO_4 , 1 ml. of which corresponds to 0.005658 g. of I. The distillate, containing II, is diluted with water up to 500 ml. 150 ml. of water and 200 ml. of 2,4-dinitrophenylhydrazine (4.0 g. in 1 liter of 2 n. HCl) solution are added to 50 ml. of solution obtained in this way. After 6-12 hours, the precipitate is filtered, washed with water, dried, at a temperature

Card 2/3

E-24

POLAND / Analytical Chemistry. Analysis of Organic Substances. E

Abs Jour: Ref Zhur-Khim, No 12, 1959, 42164.

Abstract: of 110° and weighed. This method can be applied to the analysis of mixture of I and II. The error of determination is < 1.5%. -- N. Turkevich.

Card 3/3

APPROVED FOR RELEASE: 03/13/2001
POLAND / Analytical Chemistry. Analysis of Organic Substances. E

Abs Jour: Ref Zhur-Khim, No 12, 1959, 42161.

Author : Goszczynski, S.

Inst : Not given.

Title : Quantitative Determination of the Lactam of ϵ -Aminocaproic Acid.

Orig Pub: Chem. analit., 1958, 3, No 2, 123-129.

Abstract: A method of quantitative determination of caprolactam based on its hydrolysis and determination of the ϵ -aminocaproic acid (I), which was formed, by alkalimetric titration or by the Van Slyke method is described. About 2 g. of the sample are boiled with 10 ml. of 10% HCl (II) during 1.5 hours. The mixture is diluted in water up to 25 ml. 2 ml. of the solution obtained in this manner are titrated

Card 1/3

E-22

POLAND / Analytical Chemistry. Analysis of Organic
Substances.

E

Abs Jour: Ref Zhur-Khim, No 12, 1959, 42161.

Abstract: in an apparatus for macrodetermination at 20° with
NaNO₂ in an acid medium during 30 minutes. The
error of the method is from -0.5 to +1.5%. -- N.
Turkevich.

Card 3/3

E-23

Distr: 4E3d/4E2c(j)

7

Analysis of a mixture containing ϵ -caprolactam, cyclohexanone oxime, and cyclohexanone. Stefan Goszczyński (Katedra Technol. Chem. Organicznej, Politechn. Śląskiej, Gliwice, Poland). *Chem. Anal. (Warsaw)* 3, 131-3 (1958). (English summary); cf. preceding abstr.—To about 2 g. of a mixt. of ϵ -caprolactam (I), cyclohexanone oxime (II), and cyclohexanone (III), add 10 ml. dil. HCl, and distill with steam. Det. III in the distillate by the use of 2,4-dinitrophenylhydrazine. The residue (A) contains hydroxylamine, aminocaproic acid, and HCl. Dil. the residue with H₂O to 25 ml. Take 3 ml. A, add 10 ml. H₂O, 20 ml. Al Fe alum., and 10 ml. 50% H₂SO₄. Boil for 5 min. Dil. with H₂O to about 300 ml. and titrate immediately with KMnO₄. Calc. II (in g.) from the relation: $a = 12.5 \cdot 0.005058 \cdot r$ (r being ml. 0.1N KMnO₄). Treat 2 ml. soln. A with 20 drops of thionylphthalcin soln. Titrate with alc. NaOH soln. (IV) to a deep-blue color. Add 18 ml. abs. EtOH and then a few drops of IV and compare color with standard. prep. by dissolving 0.0025 g.

equiv. CuCl₂ in 1 l. 1% NH₃ soln. Det. chlorides. Treat 2 ml. A with a few ml. H₂O and add 0.2- r_1 (ml.) 3% H₂O₂ (r_1 = ml. 0.1N KMnO₄ used for hydroxylamine detn. in 2 ml. sample by the Rashig method). Neutralize soln. with solid NaHCO₃ and heat for 5 min. Cool and add a few drops dil. HNO₃ and det. chlorides by the Mohr method. Calculate I (B) from the relation $b = 12.5 \cdot 0.0011316 \cdot (p - q)$ where p and q are vols. of NaOH and AgNO₃ in ml. used for titrating the sample. Take 10 ml. A and add 0.5- r_2 (ml.) chromic acid soln. (r_2 being vol. KMnO₄ used for titrating 2 ml. sample). Leave soln. for 30 min. at room temp. and add H₂O to 25 ml. to obtain soln. B. Det. N in 5 ml. of B with the Van Slyke app. at room temp. and with shaking for 30 min. The amt. of I is calcd. from the formula $b_1 = 12.5 \cdot 0.005049 V$, V being vol. of N in ml. collected under normal conditions. Two mixts. contg. variable amts. of I, II, and III were prep. and analyzed by the method described. Agreement was satisfactory.

Z. Kurtyka

SOV/79-29-1-18/74

AUTHORS: Fabrycy, A., Goszczyński, B.

TITLE: The Effect of Mercury Salts on 2-Methyl-4-Phenyl-Butine-3-Diol-1,2 (Deystviye soley rtuti na 2-metil-4-fenilbutin-3-diol-1,2)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 1, pp 81-86 (USSR)

ABSTRACT: For the purpose of clarifying the problem of the possibility of forming β -mercurized furan derivatives as an intermediate product and in the reaction of primary-tertiary α -glycols of the acetylene series with mercury chloride the authors investigated the reaction of the asymmetrical methyl-phenyl acetylenyl ethylene glycol (2-methyl-4-phenyl butine-3-diol-1,2) with mercury chloride. Glycol (I) was synthesized from acetol and magnesium-bromine phenyl-acetylenyl. 2-methyl-4-phenyl butine-3-diol-1,2, the primary-tertiary α -glycol of the acetylene series which has hitherto not been described in publications was synthesized. Its reaction under the influence of mercury chloride and mercury sulfate was investigated. It was found that in the case of reaction with mercury chloride (scheme) glycol forms as intermediary product, β -mercurized furan, 4-methyl-2-phenyl-3-chloro-mercury furan which is isomeric to α -chloro-mercury furan, 4-methyl-2-phenyl-5-chloro-mercury

Card 1/2

SOV/79-29-1-18/74

• The Effect of Mercury Salts on 2-Methyl-4-Phenyl-Butine-3-Diol-1,2

furan. The intermediary product of the reaction, β -mercurized furan changes in an acid medium into the final product, 4-methyl-2-phenyl furan. Thus a convenient method for the synthesis of the β -mercurized furans not substituted in the α -position was detected. These furans do not form in connection with the direct mercurization of furans and have hitherto been difficultly accessible. There are 9 references, 6 of which are Soviet.

ASSOCIATION: Silezskiy politekhnicheskii institut, Pol'sha (Silesian Polytechnic Institute, Poland)

SUBMITTED: January 5, 1958

Card 2/2

KUCZYNSKI, Wladyslaw; GOSZCZYNSKI, Stefan

Study on the approximation of the displacement function of the axis
of a reinforced concrete beam. Archiw inz lad 8 no.4:327-344 '62.

1. Katedra Budownictwa Zelbetowego, Politechnika, Lodz.

GOSZCZYNSKI, Stefan

Quantitative determination of caprolactam according to a modified Van Slyke method. Chem anal 8 no.1:87-90 '63.

1. Department of Organic Chemistry, Politechnika, Gliwice.

GOSZCZYNSKI, Stefan; ZIELINSKI, Wojciech

Colorimetric method of determining oximes. Chem anal 8 no.6:
925-929 '63.

1. Department of Organic Chemistry, Technical University, Gliwice.

TROSZKIEWICZ, Czeslaw; GOSZCZYNSKI, Stefan

Cyclization of benzylideneacetone and β -methylbenzylideneacetone oximes to the quinoline nucleus. Roczniki chemii 37 no. 7/8:919-920 '63.

1. Department of Organic Chemistry, Institute of Technology, Gliwice.

GOSZCZYŃSKI, Zbigniew.

Estrogen level in cases of primarily weak labor pains.
Gin. polska 28 no.2:179-186 Mar-Apr 1956.

1. Z Kliniki Położnictwa i Chorób Kobietych A.M. w Gdańsku.
Kierownik: prof. dr. J. Zubrzycki. Kwidzyn, ul. Dzierżyńskiego 45.

(ESTROGENS, in blood

in early labor, determ. in cases with weak labor pains,
comparison with normal cases (Pol))

(LABOR, blood in

estrogens, relation to initially weak labor pains, comparison
with normal cases (Pol))

(BLOOD

(same)

GOSZHEVSKIY, F.I.; KOZERENKO, V.N.

Regular features in the occurrence of polymetallic and rare-metal
zones and belts. Geol.sbor.[Lvov] no.2/3:36-61 '56. (MLRA 10:3)

1. L'vovskiy gosuniversitet imeni Ivana Franko)
(Ore deposits)

GOSZLETH T. Pazmany Peter Tudomayegyetem I sz. noi klinik ajanak kozlemenye. A terhesseg szules szovodes sokfoltu kemenyedessel(Sclerosis multiplexxel) Multiple sclerosis as a complication of pregnancy and delivery Magyar Norvosok Lapja, Budapest 1949, 12/5 (154-148)

A report on three cases observed among 21,410 deliveries (0.014%). The clinical picture of multiple sclerosis usually grows worse during pregnancy, especially in the last months, presumably as a result of the radical changes in metabolism which pregnancy brings with it. The first patient showed a very definite aggravation of the sclerosis during pregnancy. In the second case the sudden aggravation did not appear until the end of the third pregnancy and during labour; after delivery the patients's condition improved again. The third patient had been suffering from the disease for 10 years and her lower limbs were almost completely paralysed at the time of delivery. The pregnancy should only be interrupted in cases in which it causes appreciable aggravation, otherwise it should be allowed to continue with the patient under strict observation.

Barsony - Budapest (X, 8)

SO: Neurology & Psychiatry Section VIII Vol 3 No 7-12

HORN, B.; GOSZLETH, T.; MESZAROS, J.

Revision of the problem of manual removal of the placenta. Magyar.
noorv. lap. 15 no. 12:353-358 Dec 1952. (GML 24:1)

1. Doctors. 2. First Women's Clinic (Director -- Prof. Dr. Bela
Horn), Budapest Medical University.